Crystal data for *N*-n-butyloctadecanamide. By DAVID A. LUTZ, *Eastern Utilization Research and Development Division, Agricultural Research Service, U.S. Department of Agriculture Philadelphia, Pa.* 19118, *U.S.A.*

Crystals of *N*-n-butyloctadecanamide are monoclinic, space group $P2_1/a$, with $a=9{\cdot}06$, $b=4{\cdot}89$, $c=51{\cdot}78$ Å, $\beta=91°10'$, $Z=4$.

The sample of *N*-n-butyl octadecanamide, $C_{22}H_{45}NO$, used in this study was prepared and purified by E. S. Rothman of this Laboratory. The compound was prepared by low-temperature aminolysis of methyl octadecanoate (of better than 98 % purity as shown by gas-liquid chromatography) catalyzed by sodium methoxide (Jordan & Port, 1961), and was further purified by two recrystallizations from benzene (m.p. 81·3–82·0 °C). Single crystals were produced by slowly cooling a warm, saturated toluene solution to room temperature. Cell constants were determined from various oscillation and Weissenberg photographs; the long spacing as obtained from a powder tracing, 51·77 Å, was taken as $c \sin \beta$. The radiation used was Cu $K\alpha$ ($\lambda=1{\cdot}5418$ Å). The density was measured by flotation in methanol–water. The space group was determined from the systematic extinctions $h0l$ with h odd and $0k0$ with k odd. The crystal data are as follows: $a=9{\cdot}06\pm0{\cdot}02$, $b=4{\cdot}89\pm0{\cdot}02$, $c=51{\cdot}78\pm0{\cdot}04$ Å, $\beta=91°10'\pm10'$, $U=2294$ Å^3, $Z=4$, $D_x=0{\cdot}983$ g.cm^{-3}, $D_m=0{\cdot}978$ g.cm^{-3}. The space group is $P2_1/a$.

No further work on this compound is contemplated at present.

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Reference

JORDAN, E. F., JR., & PORT, W. S. (1961), *J. Amer. Oil Chem. Soc.* **38**, 600.